



Attorney Docket No. 5405.305

*FW*  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Smith et al  
Application No.: 10/777,441  
Filed: February 12, 2004

Group Art Unit: 3762  
Confirmation No.: 4786

For: **METHODS, DEVICES, SYSTEMS AND COMPUTER PROGRAM  
PRODUCTS FOR OSCILLATING SHAFTS USING REAL TIME 3D  
ULTRASOUND**

November 24, 2004

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. § 1.97(b)**

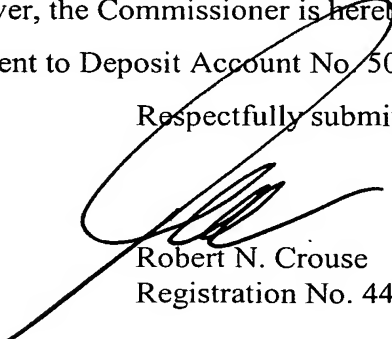
Sir:

Attached is a Form PTO-1449, together with a copy of the listed documents. A copy of any listed U.S. patent and/or U.S. patent application publication is not provided herewith in accordance with the amendment to 37 C.F.R. § 1.98(a)(2) effective October 21, 2004.

It is requested that these documents be considered by the Examiner and officially made of record in accordance with the provisions of 37 C.F.R. § 1.56 and Section 609 of the MPEP.

No fee is believed due. However, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-0220.

Respectfully submitted,


  
Robert N. Crouse  
Registration No. 44,635

Myers Bigel Sibley & Sajovec, P.A.  
P. O. Box 37428  
Raleigh, North Carolina 27627  
Telephone: (919) 854-1400  
Facsimile: (919) 854-1401  
Customer No. 20792

**CERTIFICATE OF MAILING UNDER 37 CFR § 1.8**

I hereby certify that this paper or fee is being deposited with the United States Postal Service under 37 CFR 1.8 on the date indicated above and is addressed to Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

  
Elizabeth J. Porter

<b>FORM PTO-1449 U.S. Department of Commerce</b> Patent and Trademark Office				Attorney Docket Number 5405.305		Serial No. 10/777,441	
<b>LIST OF DOCUMENTS CITED BY APPLICANT</b> (Use several sheets if necessary)							
				Applicants: Smith et al.			
				Filing Date: February 12, 2004		Group: 3762	
<b>U. S. PATENT DOCUMENTS</b>							
Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
		4,694,434	6/12/84	Von Ramm et al.	367	007	
	1.	5,161,536	3/22/91	Vilmoerson et al.	600	443	
	2.	5,329,927	7/19/94	Gardineer et al.	607	439	
	3.	5,343,665	6/28/93	Palmersten	052	588.1	
	4.	5,421,336	4/4/94	De Benardis	600	461	
	5.	5,425,370	3/23/94	Vilkomerson	600	463	
	6.	5,546,807	12/2/94	Oxaal et al.	073	606	
	7.	5,838,828	12/12/95	Mizuki et al.	382	236	
	8.	5,967,991	12/3/96	Gardineer et al.	600	461	
	9.	5,968,085	4/20/98	Morris et al.	607	116	
	10.	6,241,675	6/7/99	Smith et al.	600	443	
	11.	6,544,178	11/6/00	Grenon et al.	600	443	
<b>FOREIGN PATENT DOCUMENTS</b>							
		Document Number	Date	Country	Class	Subclass	Translation Yes   No
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
	12.	Ahmad M, Xie TR, McCulloch M, Abreo G, Runge M, Real-time three-dimensional dobutamine stress echocardiography in assessment of ischemia: Comparison with two-dimensional dobutamine stress echocardiography, <i>J. Amer. Coll. Card.</i> , 37, pp. 1303-1309, 2001.					
	13.	Armstrong G, Cardon L, Vilkomerson D, et al. Localization of needle tip with color Doppler during pericardiocentesis: In vitro validation and initial clinical application <i>J Am Soc Echocardiog</i> 14 (1), pp. 29-37 Jan 2001.					
	14.	Breyer, B. and Cikes, I, Ultrasonically marked catheter – a method for positive echographic guidance of catheters and other minimally invasive medical devices. <i>Med. and Biol. Eng. and</i>					

 EXAMINER  
 \*EXAMINER

DATE CONSIDERED

Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<b>FORM PTO-1449</b> U.S. Department of Commerce Patent and Trademark Office		Attorney Docket Number 5405.305	Serial No. 10/777,441
LIST OF DOCUMENTS CITED BY APPLICANT (Use several sheets if necessary)		Applicants: Smith et al.	
		Filing Date: February 12, 2004	Group: 3762
		<i>Comput.</i> 22, pp. 268-271, 1984.	
	15.	Firek B, Higginbotham M, Russel S, Adams D, Landolfo C, Kisslo J, Initial experience with volume-rendered, real-time three dimensional echocardiography in right ventricular endomyocardial biopsy (abstract), <i>Eur. Heart J</i> , 21, pp. 3064, 2000.	
	16.	McDicken, WN and Andersen T, Ultrasonic stylets for needles and catheters, <i>Ultras. Med. Biol.</i> , 10, pp. 499-507, 1984.	
	17.	Menz V, Vilkomerson D, Ren JF, et al. Echocardiographic transponder-guided catheter ablation feasibility and accuracy, <i>J Interv Card Electr</i> 5 (2), pp. 203-209 2001.	
	18.	Merdes CL and Wolf PD, Locating a catheter transducer in a three-dimensional ultrasound imaging field, <i>IEEE Trans. Biomed. Eng.</i> 48, pp. 1444-1452, 2001.	
	19.	Nicholson NC, McDicken WN A comparison of coupling horns for waveguides used in medical ultrasonics <i>Ultrasonics</i> 34 (7), pp. 747-755 OCT. 1996.	
	20.	Qin JX, Jones M, Shiota T, Greenberg NL, Tsujino H, Firstenberg MS, Gupta PC, Zetts AD, Xu Y, Sun JP, Cardon LA, Odabashian JA, Flamm SD, White RD, Panza JA, Thomas JD, Validation of real-time three-dimensional echocardiography for quantifying left ventricular volumes in the presence of a left ventricular aneurysm: In vitro and <i>in vivo</i> studies, <i>J. Amer. Coll. Card.</i> 36, pp. 900-907, 2000	
	24.	Ramaswami G, Al-Kutoubi A, Nicolaides AN, et al. Angioplasty of lower limb arterial stenoses under ultrasound guidance: Single-center experience, <i>J Endovasc Surg</i> 6 (1), pp. 52-58 FEB 1999.	
	22.	Schmidt MA, Ohazama CJ, Agyeman KO, Freidlin RZ, Jones M, Laurienzo JM, Brenneman CL, Arai AE, von Ramm OT, Panza JA, Real-time three-dimensional echocardiography for measurement of left ventricular volumes, <i>Amer. J. Card.</i> , 84, pp.1434-1439, 1999.	
	23.	Shiota, T, Garcia, MJ, Qin, JX, Drinko, J, Armstrong, G, Greenberg, NL and Thomas JD, Detection of exact location of cardiac catheters using real time 3-dimensional echocardiography, <i>Jour. Amer. Coll. Card.</i> , 33, pp. 486A, 1999.	
	24.	Smith, S.W., Pavy, H.E., and von Ramm, O.T., "High speed ultrasound volumetric imaging system part I: transducer design and beam steering," <i>IEEE Trans. Ultras., Ferro. and Freq. Control</i> , UFFC-38, pp. 100-108, 1991.	
	25.	Tsujino H, Jones M, Shiota T, Qin JX, Greenberg NL, Cardon LA, Morehead AJ, Zetts AD, Travaglini A, Bauer F, Panza JA, Thomas JD, Real-time three-dimensional color Doppler echocardiography for characterizing the spatial velocity distribution and quantifying the peak flow rate in the left ventricular outflow tract, <i>Ultrasound Med. Biol.</i> , 27, pp. 69-74, 2001.	
	26.	Vilkomerson D, Lyons D A system for ultrasonic beacon-guidance of catheters and other minimally-invasive medical devices, <i>IEEE Trans. Ultras., Ferro. and Freq. Control</i> 44 (2), pp 496-504 Mar 1997.	
	27.	von Ramm, O.T., Smith, S.W., and Pavy, H.E., "High speed ultrasound volumetric imaging system part II: parallel processing and display" <i>IEEE Trans. Ultras., Ferro. and Freq. Control</i> , UFFC-38, pp. 109-115, 1991.	
	28.	Webster, JG, <i>Design of Cardiac Pacemakers</i> , IEEE, New York, NY, pp. 148-149, 1995.	

EXAMINER

DATE CONSIDERED

\*EXAMINER

Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.